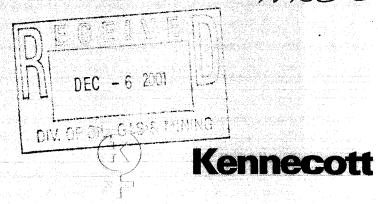
NRDC

Kennecott Utah Copper Corporation 8315 West 3595 South P.O. Box 6001 Magna, Utah 84044-6001 (801) 252-3000



December 6, 2001

Mr. Doug Bacon
Utah Department of Environmental Quality
Department of Environmental Response and Remediation
168 North 1950 West
P.O. Box 144840
Salt Lake City, Utah 84114-4840

RE: Additional KUCC Responses to Letter of October 11, 2001 regarding the State of Utah Natural Resource Damage Proposal

Dear Mr. Bacon,

This letter is provided in response to your letter of October 11, 2001 to clarify outstanding questions regarding the State of Utah Natural Resource Damage Proposal. Your comments from the October 11 letter are shown in italic font followed by Kennecott's response. Many of these questions were discussed during the TRC meeting on October 30, 2001. Hopefully this letter will address any outstanding questions you might have.

Specific Comments on the KUCC and JVWCD Response Letters -

(1) Page 1, KUCC Response Comment #1: The following is suggested wording that could be included in the Recital Section of the three party agreement. "Pursuant to the Trustee's conceptual approval of the project proposal, the technical information requested previously and still not yet received has been deferred for resolution in the South Facilities Ground Water Remedial Design Work Plan. The resolution method for the technical information will be detailed in various sub work plans, which will be developed and provided to the Trustee for approval."

This language or similar language will be considered for inclusion.

(2) Page 2, KUCC Response Comment #2: The proposed staged extraction plan for the removal of the acid core in Zone A should be explicitly detailed in the proposal. A table

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similar to Table 3-1 from the Remedial Design Work Plan (RDWP) would be helpful to present this approach to UDEQ and UDNR.

Table 3-1 from the RDWP will be incorporated into the proposal. It should be noted though that this extraction plan is conceptual and may be modified as "the effectiveness" of the containment and extraction system is monitored and modeled over time.

(3) Page 5, KUCC Response Comment #8: UDERR suggests that table 5.4A of the NRD proposal be updated. Table 5.4A needs to represent an accurate summation of the "Feed Water" for both zones and accounting of the sources so UDERR may appropriately evaluate the proposed pump rates against the NRD rebate criteria.

Table 5.4A will be updated to reflect the most recent data for the feed waters.

(4) Page 5, KUCC Response Comment #9 and Page 13, Response Comment #25: Citing the CERCLA Section 121 (e) (1), KUCC states that a reclamation bond from the Division of Oil, Gas, and Mining (DOGM) for the various Zone A facilities is unnecessary. Though UDERR does not disagree with the interpretation of the cited CERCLA section, UDERR does disagree with the statement made by KUCC that permits are not necessary. Under the 1995 Memorandum of Understanding, both UDEQ and EPA Region VIII intended that the long term maintenance and management of ongoing waste cleanup activities by KUCC would be subject to and comply with appropriate state permitting requirements. In lieu of listing the KUCC facilities on the NPL, the intention was for KUCC to be subject to normal state permitting authorities, including any requirements of DOGM.

The concept of the Zone A facilities is to provide a long-term source of municipal quality water to the affected public. Under the terms of the NRD Consent Agreement, KUCC must provide this water to a water purveyor. Consequently, the NRD proposal contemplates that KUCC will construct the specified treatment facilities and operate the facilities initially, with the object to turn the facilities over to the Jordan Valley Water Conservancy District (District) for operation during the remaining period of the Consent Decree requirements. Following that period, the facilities are to be returned to KUCC, subject to any further agreement that KUCC and the District might make to continue to utilize the facilities to continuing to provide municipal quality water to the public or otherwise, but generally is anticipated to operate in perpetuity to the extent the facilities permit for non-mining related purposes. KUCC does not understand the rationale that would support the need for a reclamation bond in favor of DOGM and is concerned that attempting to impose such a requirement might create needless complications or possibly jeopardize the prospective arrangement with the District, as the District does not want to be subject to a DOGM permit. As indicated in the draft NRD joint proposal between KUCC and JVWCD, KUCC will pay a perpetual O & M cost to JVWCD should they elect to operate the treatment facility. In the event that JVWCD declines to operate the facility, KUCC intends to use this money for the same purpose. KUCC would like to

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suggest that the language in the draft NRD joint proposal regarding perpetual O & M costs be considered as the financial assurance for this project.

The MOU states KUCC would "continue groundwater source control meaaasures at Bingham Canyon Mine waste rock dumps and other KUC facilities under the auspices of UDEQ" and discusses permitting only in the context of the state groundwater permits. Nevertheless, KUCC has obtained or will obtain UDEQ permits for Zone A facilities including a construction permit for the treatment plant and a drinking water authorization. However, the MOU does not contemplate permitting and bonding with DOGM, though where appropriate for other mining related operations and to the extent not already included under existing permits, KUCC has done so.

(5) Pages 12 and 3, KUCC Response Comment #18 and JVWCD Response Comment #18: UDERR recognizes the necessity of the seniority ranking for water rights. However, UDNR has the authority to approve or deny pump rates for this cleanup project. It would be beneficial for KUCC, the JVWCD and UDNR to meet and discuss what specific assurances the Division of Water Rights and State's Engineers Office will need from both KUCC and the JVWCD to make sure that third parties are appropriately compensated.

KUCC met with the State Trustee, Dr. Dianne Neilson, and the State Engineer, Mr. Bob Morgan, P.E., to resolve these issues on October 15, 2001. The meeting concluded that KUCC's groundwater remediation program would not have a significant impact on the regional aquifer levels above and beyond the current rate of decline that has resulted from factors other than remediation and which is significant. KUCC agreed to proactively engage the largest water users in the southwest Jordan Valley to begin to minimize declines in the regional aquifer levels regardless of the remediation program.

(6) Page 13, Response Comment #23: UDERR's original Comment No.#23 was in reference to the footnote in the State of Utah ARARs table listed in the Record of Decision for Zone A (Dec. 13, 2000). The footnote implies that at the time of the ROD signing, EPA was not prepared to determine if the treatment concentrates would be considered Bevill Exempt waste even after it traveled down the tailings line. The footnote also implies that due to the neutralization potential of the current ore tailings and under the mixture rule, the treatment concentrates could be classified as Bevill Exempt waste (pre-mine closure). When the ore tailings cease to be disposed of in the tailings line and the neutralization potential decreases, EPA and UDERR agree that the treatment concentrates will have to be characterized to determine the appropriate disposal options. In reference to the previous comment, UDERR intended to point out that certain RCRA disposal requirements may be relevant and appropriate, and KUCC will need to comply with those requirements.

In light of the recent findings concerning the cost difficulties with running the NF plant and the reduced neutralization potential of the ore tailings, UDERR believes it is important to determine if the proposed lime treatment facility and waste repository must meet special construction and permitting requirements listed under UAC R315.

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As discussed at the TRC meeting on October 30, 2001, KUCC has reconsidered the treatment options and does not intend to utilize the Nanofiltration Plant as part of the remediation system at this time. Rather, KUCC is proposing that the acid well water will be combined with meteoric leach water from the waste rock dumps and will be routed to the tailings line with proposed lime treatment based on the available neutralization potential in the tailings. Unlike the Nanofiltration plant concentrate that typically had cadmium concentrations greater than 1.0 mg/L, the raw acid well water ranges from 0.37 mg/L cadmium to 1.2 mg/L cadmium. No other RCRA metals exceed TCLP characteristic levels. When this water is combined with the meteoric leach water, it definitely will not exceed 1.0 mg/L cadmium. It should also be noted that at full scale pumping (see table 3-1 in the RD Work Plan), the combined flow from the two acid wells will be less than 1.0 mg/L cadmium as the second acid extraction well will be located down gradient in an area with overall lower metal concentrations. Studies are also under way to demonstrate that the lime treatment plant sludge will not exhibit hazardous characteristics.

If you have any questions regarding KUCC's responses, please contact me at 801-569-7128.

Sincerely,

Jon Cherry, P.E.

Senior Project Engineer

cc: Dr. Eva Hoffman, U. S. Environmental Protection Agency Region VIII
Richard Bay, Jordan Valley Water Conservancy District
Jarred Manning, Utah Department of Natural Resources/Division of Water Rights
Tom Munson, Utah DNR/Division of Oil, Gas and Mining